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Run
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Maximum Match
Listing first
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Searched:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     seq length: 0 seq length: 40
N_Geneseq_101002:*

1: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1980.DAT:*

2: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1981.DAT:*

3: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1982.DAT:*

3: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1983.DAT:*

4: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1983.DAT:*

5: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1986.DAT:*

6: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1986.DAT:*

7: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1986.DAT:*

9: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1980.DAT:*

9: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1999.DAT:*

10: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1999.DAT:*

11: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1993.DAT:*

12: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1993.DAT:*

13: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1993.DAT:*

14: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1993.DAT:*

15: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1993.DAT:*

16: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1993.DAT:*

17: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1993.DAT:*

18: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1993.DAT:*

19: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1993.DAT:*

20: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1993.DAT:*

21: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1993.DAT:*

22: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA1993.DAT:*

23: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA20001.DAT:*

24: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA2001A.DAT:*

24: /SIDSZ/gcgdata/geneseq/geneseqn-emb1/NA2001A.DAT:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      March 26, 2003, 11:15:29; Search time 179.455 Seconds (without alignments) 263.532 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IDENTITY_NUC Gapop 10.0 , Gapext 1.0
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21
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    | SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1987, DAT: *
| SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1986, DAT: *
| SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1986, DAT: *
| SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1986, DAT: *
| SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1990, DAT: *
| SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1990, DAT: *
| SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1991, DAT: *
| SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1992, DAT: *
| SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1993, DAT: *
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| SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1999, DAT: *
| SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1999, DAT: *
| SIDS2/gcgdata/geneseq/geneseqn-emb1/NA1999, DAT: *
| SIDS2/gcgdata/geneseq/geneseqn-emb1/NA2000, DAT: *
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45 gi
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

a	ი	ი	ი	ი	ი	ი		a	Result
9	œ	7	0	ហ	4	ω	N	٣	NO.
12.6	12.8	12.8	12.8	13.2	13.4	13.6	13.8	14.6	Score
60.0	61.0	61.0	61.0	62.9	63.8	64.8	65.7	69.5	Query
24	26	26	26	33	21	25	24	30	Query Match Length DB
24	24	21	19	24	20	19	20	21	B
ABA96866	AAD33289	AAA37780	AAV39091	ABN85553	AAX87770	AAV39775	AAX59144	AAC93561	ID
Human p34cdc2-rela	Human TNFR-6alpha	Human TNFR-6 alpha	Human tumour necro	Human large protei	Insectidical pepti	Oligonucleotide SE	Pea plastid phosph	Cat flea HMT allan	Description

Flea Malpighian tubule and head and nerve cord tissue derived nucleic acids useful for the prevention, diagnosis and treatment of flea

					C 41						35	34	33	32	31			c 28		26	25	24	c 23	22	c 21	20	c 19	18	c 17		15	14	13	12	c 11	
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	14	22	22	21	21	21	20	12	21	23	23	24	22	24	22	16	21	16	16	16	24	22	22	24	24	24	24	24	24	24	24	21	24	24	24	21
	639	AAI62113	AAF77294	AAA74614	œ	655	AAV63683	AAQ10041	AAZ69989	ABC21077	107	ABN81285	AAH50180	817	770	956	224	502	9	ശ	771	AAF17280	AAF17279	ABQ12564	ABQ12523	ABQ11028	ABQ10987	0	ABQ04659	ABQ00343	AAD34707	228	AAD34703	AAD34699	47	AAZ30299
•	ture probe	bean 318013 re	Ľ	-2 PCR primer	primer 2		long termi	oads :			Oligonucleotide SE	promoter po	238/58	NA an	prime	PCR primer MBL002.	lacti	r for	롰	primer !	Early paired-domai	Information carryi	Information carryi		Oligonucleotide ad	igonucleotide	rator and	ample oligo 1411	rator a	et operator	' end PCR prim	Primer 23540 used				

ALIGNMENTS

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RESULT 1
AAC93561/c
ID AAC935
PRINCE X PRINCE 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cat flea; hindgut and Malpighian tubule; HMT; head and nerve cord; HNC; flea infestation; vaccine; antiparasitic; therapeutic target; diagnosis; detection; PCR primer; ss.
                                                                                                                                   WPI; 2000-656323/63.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cat flea HMT allantoinase PCR primer, SEQ ID NO:50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAC93561;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAC93561 standard; DNA; 30 BP
                                                                                                                                                                                                                                                                                                                                                                                                                09-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-APR-2000; 2000WO-US09437.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-OCT-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200061621-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ctenocephalides felis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19-FEB-2001 (first entry)
                                                                                                                                                                                                                                                                                                                   (HESK-) HESKA CORP.
                                                                                                                                                                                                                                3
                                                                                                                                                                                                                           Gaines PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                     99US-0128704
                                                                                                                                                                                                                           Stinchcomb
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                                                                                                                                                                                                                                Wisnewski
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RESULT 2
AAX59144
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cc acids which are expressed in hindgut and Mahighian tubule (HMT) tissue or head and nerve cord (HNC) tissue. The invention also relates to the concoded proteins. The invention additionally encompasses expression constructs, recombinant viruses and recombinant cells comprising the nucleic acids of the invention, recombinant production of the proteins, antibodies against the proteins, a method of identifying inhibitors of the proteins, and compositions comprising the inhibitors for compositions associated with flea infestations. For example, the nucleic acids may be used in the prevention, treatment and diagnosts of diseases considered with flea infestations. For example, the nucleic acids may be used as DNA probes in diagnostic assays (e.g., PCR) to detect and quantitate the presence of cat flea or other homologous nucleic acid sequences in samples. They may also be used as DNA probes in diagnostic assays (e.g., PCR) to detect and quantitate the proteins and their role in metabolism. The HMT and HNC contains and their role in metabolism. The HMT and HNC contains and their role in metabolism. The HMT and HNC contains and their role in metabolism. The HMT and HNC contains and their role in metabolism. The HMT and HNC contains and their role in metabolism. The HMT and HNC contains and their role in metabolism. The HMT and HNC contains and their role in metabolism. The HMT and HNC contains and activity. The antibodies of HMT and HNC protein expression and activity. The contains and activity. The samples (e.g., by enzyme linked immunosorbent assay (ELISA)). The presente of fleas polypeptides contains and amplification of the contains and amplificat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
Matches 17
                                                                                                                                  29-JAN-1998;
08-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to novel cat flea (Ctenocephalides felis) nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 4; Page 256; 964pp; English.
              WPI; 1999-394908/33
                                                    Burgess D,
                                                                                                                                                                                             07-DEC-1998;
                                                                                                                                                                                                                                    17-JUN-1999
                                                                                                                                                                                                                                                                           WO9929161-A1
                                                                                                                                                                                                                                                                                                                 Pisum sativum
                                                                                                                                                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                        sweetness; disease resistance;
                                                                                                                                                                                                                                                                                                                                                                                         Pea; bsg gene; mutant; plastid phosphoglucomutase;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Pea plastid phosphoglucomutase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX59144 standard;
                                                                                           (SEMI-) SEMINIS VEGETABLE SEEDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   బ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GTGCTACTGATAGAGTGTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 isolate and amplify a cat flea cDNA of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGCTTCTAAAAGAGGGTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               l Similarity
17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 6 A;
                                                       Webster D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                    98US-0015711.
97US-0986616.
                                                                                                                                                                                               98WO-US25912.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               69.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11 C; 6 G; 7 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 14.6;
Pred. No. 4.
                                                                                                                                                                                                                                                                                                                                                                        transgenic plant; PCR; primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                 PCR primer PGM-R1816
                                                                                               INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 21;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30;
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RESULT 3
AAV39775/c
ID AAV397
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Best Local S
Matches 15
                                                                           Braun A, Dum
Koster H, Lit
Then Boom F
                                                                                                                                                                  06-NOV-1996;
23-JAN-1997;
23-JAN-1997;
19-SEP-1997;
                                                                                                                                                                                                                          08-OCT-1997;
06-NOV-1996;
06-NOV-1996;
06-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      in the amplification of pea plastid phosphoglucomutase (PGM) cDNA. The invention relates to a new variety of pea that is resistant to Fusarium wilt fungus and powdery mildew fungus and which contains, within its genome, a homozygous recessive gene, i.e. the bsg gene (see AAX59136), which codes for PGM. The bsg gene contains a mutation in an intron 3' splice site. bsg gene contains a mutation in an intron 3' splice site. Wild-type plastid PGM cDNA (see AAX59146) and 3 mutant plastid PGM cDNAs (see AAX59147-49) have been isolated by PCR. A claimed Pisum sativum variety that contains the mutant bsg gene within its genome produces peas that contains the mutant bsg gene within its genome produces peas that exhibit a lower level of starch, an elevated level of sucrose and a decreased level of alcohol insoluble solids, which correlates with high product quality.
Sequencing nucleic acid by mass spectrometric analysis detecting nucleic acids, telomerase activity, oncogene cancer-specific sequences, for diagnosis of disease
                                                                                                                                                                                                                                                                                                                                                                                                                     Mass spectrometry; diagnosis; detection; biological sample; genetic disease; chromosomal abnormality; identification; he pathogenic organism; telomerase activity; oncogene mutation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A Pisum sativum variety containing a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 7; Page 8; 109pp; English.
                                                                                                                                                                                                                                                                                               06-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Oligonucleotide SEQ ID NO:293 from WO9820166.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAV39775;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAV39775 standard; cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This oligonucleotide,
                                                                                                                                                                                                                                                                                                                         14-MAY-1998.
                                                                                                                                                                                                                                                                                                                                                    WO9820166-A2
                                                                                                                                                                                                                                                                                                                                                                                                        cancer-specific
                                                     WPI; 1998-286975/25
                                                                                                                                          (SEQU-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 GTGCTACTGATAGAGTG 17
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                                                                                                                                          SEQUENOM INC.
                                                                                               Damhoffer-Demar
Little DP, Lou
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first
                                                                                                                                                                  97US-0947801

96US-0744481

96US-0744590

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96US-0746035

96US-0746988

97US-0787639

97US-0787639

97US-0933792
                                                                                                                                                                                                                                                                                               97WO-US20444
                                                                                                                                                                                                                                                                                                                                                                                                         sequence; primer; ss
                                                                                  Xiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           entry)
                                                                              ar Β,
Lough L
τ G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        65.7%;
88.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               termed PGM-R1816, was used as a PCR primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>,</u>
                                                                                              DM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 13.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                        detection; biological sample; infection;
abnormality; identification; heredity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                               D, Higgins GS, Jv
Siegert CW, Tang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      recessive bsg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .1e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20;
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                                                                                                  Jurinke
ang K;
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                               for
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0

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Disclosure; Page 328; 478pp;

English

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AAX87770/c

ID AAX87770 standard; DNA; 21 BP
XX

AC AAX87770;

XX

DT 09-NOV-1999 (first entry)

XX

DT 09-NOV-1999 (first entry)

XX

Insecticide; EF40; biological

KW transgenic plant; insect resi

KW cotton; PCR; primer; RACE; ss

XX

OS Synthetic.

OS Beauveria bassiana.

PN W09941393-A1.

XX

PN W09941
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            Primer EF40-R6 is a reverse primer used in the of Beauveria bassiana strain CRW 148wa(1) (IMI 3' and 5' RACE were used to obtain the natural
                                                                                                                                                                         Example 6; Fig 9; 80pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Insecticide; EF40; biological control; insect control;
                                                                                                                                                                                                                                                          polycysteine peptides from Beauvaria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PCR; primer; RACE; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               plant; insect resistance; crop protection; tobacco;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          peptide EF40 5' RACE primer EF40-R6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98GB-0028638
98GB-0003361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-GB00465
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Osborn RW,
                                                                                                                                                                                                                                                          for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Robinson MP;
                                                                                                                                                                                                                                                              control
            5' RACE amplification 37923) cDNA. PCR, coding sequence (see
                                                                                                                                                                                                                                                          Of.
                                                                                                                                                                                                                                                          insect pests
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Query Match
Best Local Similarity
Matches 15; Conserv

Conservative

0,

Mismatches

Indels Length

0

Gaps

0

33,

62.9%;

Score 13.2; Pred. No. 2.

.3e+03; DB 24;

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ARRSULT 5
ARN8553/c
ID ARN855
XX ARN
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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                                                                              The invention relates to human large protein 9.24, the polynucleotide encoding said polypeptide and the method for producing this polypeptide by DNA recombination technology. The invention also discloses the method for curing several diseases, such as embryonic development deformity, protein metabolism disturbance, tumour and immunologic system disturbance disease by said polypeptide. The invention also discloses an antagonist for resisting the polypeptide and its therapeutic action and also discloses the application of polynucleotide coding this novel human large protein 9.24. The present sequence is that of a human large protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
   Sequence
                                                                                                                                                                                                                                                                                                                                                                           Example 4; Page 20
                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel polypeptide human large protein 9.24 and polynucleotide for encoding the polypeptide -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mao Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-JUL-2000; 2000CN-0117096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-JUL-2000; 2000CN-0117096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; large protein 9.24; embryonic development deformity; tumour; protein metabolism disturbance; immunologic system disturbance;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human large protein 9.24 PCR primer SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABN85553;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABN85553 standard; DNA; 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             insecticidal peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-305593/35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (SHAN-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SHANGHAI BIODOOR GENE DEV
      ü
                                                            primer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21 BP; 5 A;
   B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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   σ
                                                            useful in examples of the invention.
   P
                                                                                                                                                                                                                                                                                                                                                                           (Disclosure); 34pp; Chinese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                63.8%;
93.3%;
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C;
   7 C;
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   <u>ი</u>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
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Pred. No. 1.7e+03;
0; Mismatches 1
   14 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            immunologic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          T;
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      other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20;
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GTGCTACTGATAGAGTGTAC 20 GTTCTACTGATAGAAATTAC 1

Matches

Local

1 Similarity 16; Conserv

Conservative

<u>,</u>

Mismatches 13.6;

Indels Length

0

Gaps

٥,

1.3e+03;

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19;

64.8%; 80.0%;

Score 13.6 Pred. No.

Sequence 25

specified within the specification, only within

the

sequence listing

BP; 8 A; 6 C; 4 G; 7 T; 0 other;

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20

CC A process has been developed for determining the sequence of a target nucleic acid. The process comprises: (i) generating at least two fragments (F) from the target nucleic acid; and (ii) analysing F by mass spectrometry (MS). The sequences in AAVJ9483 to AAVJ952 are consisted with a sequences in AAVJ9483 to AAVJ952 are consisted with a sequences in the mass spectrometric analysis of the above process. The process is used to detect genetic diseases (e.g. haemophilia, thalassemia, Duchenne muscular dystrophy, Alzheimer's disease, cystic fibrosis and many others) or chromosomal abnormalities (or predisposition); infections and cancers; also for establishing identity and heredity. Particular applications are diagnosis of neuroblastoma, detecting telomerase, determining family relationships and HLA compatibility, and in genetic fingerprinting. Compared with known methods using MS, this process requires fewer specific reagents and is better suited to automation. Extended primers are shorter; primer annealing is more efficient and the process allows detection of anny sequences simultaneously. The present sequence represent an oligonucleotide from the present invention, which is not actually

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28

TGCTACTGATAGAGTGTA 19

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RESULT 6
AAV39091/c
ID AAV390
XX AAV390
XX AAV390
XX Human
XX Human
XX Human
XX Homo E
XX WO983(
XX I 14-JU
XX I 14-JU
XX I Ebner
XX Human
PT Ebner
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XX Human
PT CC Full F
CC Full T
CC Alpha
CC TNFR-
CC alpha

                                                                                     RESULT 7
AAA37780/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The reverse and forward (AAV39090) primers were used to amplify the full length human tumour necrosis factor receptor-6 alpha (TNPR-6 alpha) cDNA (AAV39085). The PCR product was used for expressing the TWFR-6 alpha protein (AAW63622). The invention provides for TWFR-6 alpha and TWFR-6 beta acpma (AAW99086), and the TWFR-6 alpha and TWFR-6 beta are members of the tumour necrosis factor receptor (TWFR-6 beta are members of the tumour necrosis factor receptor (TWFR) family. TWFRs are expressed in endothelial cells, keratinocytes, normal prostate and prostate tumour tissue. For a number of disorders of these cells, particularly of the immune system, substantially altered (whether increased or decreased) levels of TWFR-6 alpha and/or TWFR-6 beta gene expression can be detected, therefore the TWFR-6 alpha and to be useful in the diagnosis of such disorders. Mutations of the TWFR-6 beta polypeptides, nucleic acids and antibodies are claimed to be useful in the diagnosis of such disorders. Mutations of the TWFR-6 alpha and/or TWFR-6 beta polypeptides, nucleic acids and antibodies are claimed to be useful in the diagnosis of such disorders. Mutations of the TWFR-6 alpha and/or TWFR-6 alpha and/or TWFR-6 beta polypeptides, nucleic acids and antibodies are claimed to
                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                           Best
                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human tumour necrosis factor receptor-6 alpha; TNFR-6 alpha; TNFR-6 beta; endothelial cells; keratinocytes; normal prostate; apoptosis; PCR; prostate tumour tissue; primer; amplification; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 alpha and TNFR-6 beta genes can also be detected. The TNFR are also claimed to be useful for identifying ligands which useful in the treatment of apoptosis related disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAV39091 standard; cDNA;
                                                            AAA37780 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9830694-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 2;
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                                                                                                                                                                                                                                                                                                                         l Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Feng P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Page
                                                                                                                                                                                                                                                                                                                                                                                                                                             BP; 4 A; 8 C; 7 G; 7 T; 0 other;
                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          53;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    91pp; English.
                                                                                                                                                                                                                                                                                                                                                     61.0%;
87.5%;
                                                                                                                                                                                                                                                                  21
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                                                                                                                                                                                                                                                                                                                                                        Score 12.8; DB 1
Pred. No. 3.5e+03
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                                                                                                                                                                                                                                                                                                                                                                                   DB 19;
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                                                                                                                                                                                                                                                                                                                                                                                Length
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                                                                                                                                                                                                                                                                                                                                                                                         26;
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Best Local (
                                      Matches
                                                                                                                                                 associated with inappropriate TNFR expression. The nucleic acids, associated with inappropriate TNFR expression. The nucleic acids, polypeptides, antibodies, agonists and antagonists against them may be used for the treatment of a range of conditions such as disorders associated with neovascularisation (especially coular neovascularisation) (such as solid tumours and malignancies (e.g. prostate cancer, breast cancer and colon cancer), diabetic retinopathy and pre-maturity macular degeneration), allergies, inflammation, thyroid associated opthalmopathy tissue/cell damage, wounds, microbial and parasitic infections, bone disease (e.g. osteoporosis), atherosclerosis, pain, cardiovascular disease (e.g. stroke), neurodegenerative disporders (e.g. Alzheimer's disease) immune disorders (e.g. graft rejection), rheumatism, liver disease, autoimmune diabetes, asthma, psoriasis, septic shock and ulcerative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-MAR-1999;
27-APR-1999;
30-APR-1999;
02-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; Tumour necrosis factor receptor 6; TNFR-6alpha; TNFR-6beta; coular neovascularisation; solid tumour; malignancy; prostate cancer; breast cancer; colon cancer; diabetic retinopathy; microbial infection; pre-maturity macular degeneration; allergy; inflammation; tissue damage; thyroid associated opthalmopathy; cell damage; parasitic infection; bone disease; osteoporosis; atherosclerosis; cardiovascular disease; neurodegenerative disorder; Alzheimer's disease; immune disorder; graft rejection; rheumatism; liver disease; autoimmune diabetes; asthma; graft rejection; rheumatism; liver disease; autoimmune diabetes; asthma;
                                                                                                                                                                                                                                                                                                                                                                         This sequence represents a PCR primer used to isolated DNA encoding the human tumour necrosis factor receptor 6 alpha (TNFR-6alpha) of the invention. The TNFR-6alpha and TNFR-6beta DNA and protein sequences can be used in the prevention, treatment and diagnosis of diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nucleic acids encoding human tumour necrosis factor receptor (TNFR) proteins TNFR-6alpha and TNFR-6beta, useful for treating e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-DEC-2000
                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-572174/53.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alzheimer's disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (HUMA-) HUMAN GENOME SCI INC
 6 ACTGATAGAGTGTACC 21
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                                      14;
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                                                        Similarity
                                                                                                       26
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Page 218; 332pp; English
                                                                                                       BP;
                                    Conservative
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99US-0124092.
99US-0131279.
99US-0131964.
99US-0146371.
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87.5%;
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                                                                                                         G; 7 T; 0 other;
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Pred. No. 3
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3.5e+03;
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AAD33289/c
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                                            RESULT
                                                                                                                                                    Best Loc
Matches
                                                                                                                                                                                                                                       falpha and 6beta protein and their corresponding nucleic acids. The invention provides screening methods for identifying agonists and antagonists of TNFR-falpha and 6beta activity. The invention also provides diagnostic and therapeutic methods for detecting and treating immune system-related disorders. The method is useful for treating or preventing an inflammatory disease or disorder selected from bowel disease or disorder selected from bowel adsease, encephalitis, atherosclerosis and psoriasis, an autoimmune disease or disorder selected from systemic lupus erythematosus, arthritis, rheumatoid arthritis, multiple sclerosis, Crohn's disease, and autoimmune encephalitis, present sequence is a PCR primer used for amplifying DNA encoding human TNFR-falpha protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; tumour necrosis factor receptor; TNFR-6alpha; TNFR-6beta; therapy; immune system-related disorder; inflammatory disease; immunosuppressive; bowel disease; encephalitis; atherosclerosis; gastrointestinal-Gen; autoimmune disease; systemic lupus erythematosus; rheumatoid arthritis; multiple sclerosis; Crohn's disease; autoimmune encephalitis; allergy; graft versus host disease; GVHD; antinflammatory; psoriasis; arthritis; neuroprotective; antiarteriosclerotic; dermatological; asthma; PCR;
                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 3b;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel nucleic acid molecules comprising a polynucleotide encoding human tumor necrosis factor receptor (TNFR)-6alpha and 6beta polypeptides useful for treating disease e.g. inflammatory and autoimmune disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-AUG-2000; 2000US-227598P.
21-NOV-2000; 2000US-252131P.
06-JUL-2001; 2001US-303224P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-AUG-2001; 2001WO-US26396
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human TNFR-6alpha DNA amplifying 3' PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUL-2002
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               ABA96866 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (HUMA-) HUMAN
                                                                                        19
                                                                                                                                                                 Local
                                                                                                                  6 ACTGATAGAGTGTACC 21
                                                                                                                                                                                                                                                                                                                                                                                                                          invention relates to human tumour necrosis factor receptor (TNFR) -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2002-281068/32.
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                                                                                                                                                    14;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ebner R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Page
                                                                                                                                                                                                               BP; 4 A; 8 C; 7 G; 7 T; 0 other;
                                                                                                                                                    Conservative
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               DNA;
                                                                                                                                                                 61.0%;
87.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Yu G, Ruben SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                          350pp; English.
               24
               ВP
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                                                                                                                                                                   Score 12.8;
Pred. No. 3
                                                                                                                                                    Mismatches
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                                                                                                                                                3.5e+03;
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                                                                                                                                                                                   Length
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RESULT 10
AAZ30299/c
ID AAZ302
XX
AC AAZ302
XX
AC AAZ302
XX
DT 11-FEB
XX
DE Primer
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                                                                                                                                                                                                                                                                                                                                                The invention relates to human p34cdc2 related protein kinase 9 (AAM49087), nucleic acids encoding it (ABA96865), and a method for the CC recombinant production of p34cdc2 related protein kinase 9. The protein has a molecular weight of 9 Mp. The present invention additionally CC discloses an antagonist of p34cdc2 related protein kinase 9 for CC therapeutic use, and an antibody which specifically binds to p34cdc2 related protein kinase 9 for CC therapeutic use, and an antibody which specifically binds to p34cdc2 related protein kinase 9, and CC immunodeficiency virus) infection, immune disorders, inflammatory CC immunodeficiency virus) infection, immune disorders, inflammatory CC conditions, psoriasis and heteroplassia. The protein may also be used to screen for modulators of its activity or for peptide fingerprinting CC identification. The polynucleotide can be used as a primer for nucleic caid amplification reactions or as a probe for hybridisation reactions, CC exemplification of the invention to isolate human p34cdc2 related protein kinase 9 cnum
                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 15
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                                 11-FEB-2000
                                                                 AAZ30299;
                                                                                                 AAZ30299
                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 2; Page 18; 40pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human p34cdc2 related protein kinase 9 and encoding polynucleotide, used in diagnosis and treatment of malignant tumors, hemopathy, human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2002-090428/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14-MAY-2001; 2001WO-CN00772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200198320-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-MAY-2000; 2000CN-0115708.
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                                                                                                                                                                                                  GCTACTGATAGAGTGTACC
                                                                                                                                                                             GCTAGTGATGGGGTTTACC
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                                                                                                                                                                                                                                                            Similarity
                                                                                                 standard;
                                                                                                                                                                                                                                                                                                           24 BP; 6 A;
                                                                                                                                                                                                                                                                                                                                           CDNA.
                                                                                                                                                                                                                                               Conservative
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                              (first entry)
                                                                                                 DNA;
                                                                                                                                                                                                                                                          60.0%;
78.9%;
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Pred. No. 4.4e+03;
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                                                                                                                                                                                                                                                                                                                                                           related protein
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Primer 23540 used to amplify the left terminus of Ad5

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AAD34709/c
ID AAD347
XX AAD347
AC AAD347
XX 16-JUL
XX 3' end
XX Tetrac
KW Tetrac
KW primer
XX Caulif
XX Caulif
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Adenovirus type 5 (Ad5), in the course of the invention. The Adenovirus type 5 (Ad5), in the course of the invention. The amplified sequence was used to construct an adenovirus gene transfer system that uses a trans-complementation between the VAI and VAII genes to provide efficient transfection. The gene transfer vector comprises, in 5, to 3, orientation a first Ad inverted terminal repeat (ITR); an Ad VAI gene and/or VAII gene; a gene foreign to Ad, where the gene is operably linked to a promoter functional in Ad target cells; and a second Ad ITR. The gene transfer vectors can carry large amounts (e.g. 28-32kb) of foreign DNA. All of the viral genes encoding AV proteins can be substituted by foreign DNA so that the immunogenicity of the recombinant AV particles can be reduced or abolished. The vectors can be used for introducing and expressing foreign genes in Ad target cells, e.g. for gene therapy. The foreign gene may encode for e.g. a protein selected from dystrophin, coagulation factor VII, cystic fibrosis transmembrane regulator protein, ornithine transcarbamylase,
                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New adenovirus gene transfer vector, used for expressing foreign genes encoding, e.g. dystrophin and alpha-1 antitrypsin Rb or p53 \,
                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
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                      Cauliflower mosaic virus
                                                                       transcriptional
                                                                                      Tetracycline repressor; TR; tetracycline operator cassette; promoter;
                                                                                                                         3' end
                                                                                                                                                        16-JUL-2002
                                                                                                                                                                                                                         AAD34709 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            alphal-antitrypsin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 1; Page 42; 73pp; English.
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                                                                                                                                                                                                                                                                                                            GTGTTACTCATAGCGTCTA 6
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                                                                                                                      PCR primer Rtrip used in generating tripleX truncated promoter
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                                                                                                                                                                                                                                                                                                                                                                            Conservative
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                                                                        terminator;
                                                                                                                                                                                                                          DNA;
                                                                                                                                                        entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            p53.
                                                                     enhancer; plant herbicide resistant; PCR
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                                                                                                                                                                                                                                                                                                                                                                                            Score 12.6; DB 21
Pred. No. 4.5e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                           G; 6 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                           DB 21;
                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                          Length 27;
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RESULT 12
AAD34699
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CC or tetracycline operator cassette, comprising a promoter operatly linked to TR coding sequence, a transcriptional terminator sequence and two CC enhancer sequences and another promoter with at least one of tetracycline operator sequences, coding region of a desired polynucleotide, second transcriptional terminator sequence located 3' of the polynucleotide and CC two enhancer sequences. The invention is useful for modulating the CC expression of a gene in a plant, for making a plant herbicide resistant; CC and for expressing the desired gene in specific plant tissues. The CC invention is useful as a substitute for tetracycline, any currently known CC invention is useful as substitute for tetracycline, any currently known CC tetracycline analogue, and/or any known analogues functional equivalents. CC The tetracycline analogue and/or equivalent may have inherent properties CC that make it advantageous to its application in a tetracycline inducible constant or the compared to tetracycline, known tetracycline constant or the present constant or the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Golovko A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-SEP-2000; 2000US-231522P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-SEP-2001; 2001WO-EP10315
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                                                                   07-SEP-2001; 2001WO-EP10315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 6 A; 6 C; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention relates to a novel tetracycline repressor (TR)
                     09-SEP-2000; 2000US-231522P
                                                                                                                                                                                                             Unidentified
                                                                                                                                                                                                                                                      transcriptional
                                                                                                                                                                                                                                                                           Tetracycline repressor; TR; tetracycline operator cassette;
                                                                                                                                                                                                                                                                                                                         Tet operator fragment DNA, tetO-r used to construct promoter cassettes
                                                                                                                                                                                                                                                                                                                                                                         16-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAD34699 standard; DNA;
                                                                                                                                                               WO200220811-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (BADI ) BASF PLANT SCI GMBH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6 ACTGATAGAGTGTA 19
| ||||||||||
20 AGTGATAGAGTGTA 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hall G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29F; 193pp; English.
                                                                                                                                                                                                                                                          terminator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   59.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       G; 8 T; 0 other;
                                                                                                                                                                                                                                                          enhancer; plant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 12.4; DB 24; Pred. No. 5.5e+03;
                                                                                                                                                                                                                                                             herbicide resistant; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20;
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0

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RESULT 13
AAD34703
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         operator sequences, coding region of a desired polynuclectide, second transcriptional terminator sequence located 3' of the polynucleotide and two enhancer sequences. The invention is useful for modulating the expression of a gene in a plant; for making a plant herbicide resistant; and for expressing the desired gene in specific plant tissues. The invention is useful as a substitute for tetracycline, any currently known tetracycline analogue, and/or any known analogues functional equivalents. The tetracycline analogue and/or equivalent may have inherent properties that make it advantageous to its application in a tetracycline inducible system. For e.g. when compared to tetracycline, known tetracycline functional equivalents. The present sequence is tet operator fragment DNA used in constructing the 35S- and MAS-based promoter cassettes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene
                                                                                                                                                                                                                                                                                                                                                  Tet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to a novel tetracycline repressor (TR) and/ or tetracycline operator cassette, comprising a promoter operably linked to TR coding sequence, a transcriptional terminator sequence and two enhancer sequences and another promoter with at least one of tetracycline
                                                                                                                                          09-SEP-2000; 2000US-231522P
                                                                                                                                                                         07-SEP-2001; 2001WO-EP10315
                                                                                                                                                                                                        14-MAR-2002
                                                                                                                                                                                                                                     WO200220811-A2
                                                                                                                                                                                                                                                                    Unidentified
                                                                                                                                                                                                                                                                                                transcriptional terminator;
                                                                                                                                                                                                                                                                                                                  Tetracycline repressor; TR;
                                                                                                                                                                                                                                                                                                                                                                                                              AAD34703;
                                                                                                                                                                                                                                                                                                                                                                                                                                            AAD34703 standard; DNA; 31 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 1; Fig 29F; 193pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel tetracycline repressor and/or tetracycline operator cassette having promoters, transcriptional termination sequences, enhancer sequences and coding region of desired polynucleotide for modulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Golovko A,
Novel tetracycline repressor and/or tetracycline operator cassette having promoters, transcriptional termination sequences, enhancer
                                                WPI; 2002-339804/37
                                                                                                                                                                                                                                                                                                                                                                              16-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (BADI ) BASF
                                                                                                           (BADI )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6 ACTGATAGAGTGTA 19
                                                                                                                                                                                                                                                                                                                                               operator and MAS tata fragment DNA, tetO-tata-r.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  expression
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    l Similarity
13; Conserv
                                                                                                             BASF PLANT SCI GMBH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP; 7 A; 5 C; 5 G; 6 T; 0 other;
                                                                              Ha11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PLANT
                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                            G
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     59.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GMBH
                                                                                                                                                                                                                                                                                                   tetracycline operator cassette; promoter; enhancer; plant herbicide resistant; ss.
                                                                                                                                                                                                                                                                                                 enhancer; plant herbicide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 12.4;
Pred. No. 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .6e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23;
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to TR coding sequence, a transcriptional terminator sequence and two CC enhancer sequences and another promoter with at least one of tetracycline operator sequences and another promoter with at least one of tetracycline CC enhancer sequences, coding region of a desired polynucleotide, second CC transcriptional terminator sequence located 3' of the polynucleotide and CC two enhancer sequences. The invention is useful for modulating the CC expression of a gene in a plant; for making a plant herbicide resistant; and for expressing the desired gene in specific plant tissues. The CC invention is useful as a substitute for tetracycline, any currently known tetracycline analogue, and/or any known analogues functional equivalents. The tetracycline analogue and/or equivalent may have inherent properties that make it advantageous to its application in a tetracycline inducible system. For e.g. when compared to tetracycline, known tetracycline canalogue or known tetracycline in the constructional equivalents. The present CC analogue or known tetracycline in the constructional equivalents. The present CC sequence is tet operator and MAS tata fragment DNA used in constructing CC the 355- and MAS-based promoter cassettes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to a novel tetracycline repressor (TR) and/or tetracycline operator cassette, comprising a promoter operably linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fig 29F; 193pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          English.
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밁 Ś Matches Query Match 18 ACTGATAGAGTGCA Local 6 ACTGATAGAGTGTA 19 Similarity Conservative 32 59.0%; 0 Score 12.4; DB 24; Pred. No. 5.8e+03; Mismatches 5.8e+03 Indels Length 31; 0 Gaps 0

Sequence

31 BP; 12

A; 5 C;

5 G; 9 T; 0 other;

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discontinuous primer extension; genetic polymorphism detection;
                                                                       Sample oligo 1411-1G
                                                                                                            21-NOV-2000
                                                                                                                                              AAA62281;
                                                                                                                                                                                 AAA62281 standard; DNA; 32 BP
                                                                                                          (first entry)
   capture oligo;
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Sample oligo; microsatellite; repeat sequence length determination;

Unidentified

primer_bind repeat_region /*tag= 10..32 Location/Qualifiers /bound_moiety= "synthetic capture oligo" /*tag= ۵, മ

WO200032824-A2

08-JUN-2000

01-DEC-1999; 99WO-US28584.

03-DEC-1998;

98US-0205114

(PEKE) PERKIN-ELMER CORP

ΑĽ, Blasband

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WPI; 2000-412360/35.

Determining number of genetic polymorphisms repeat units in a target region for involves using discontinuous primer extension identifying

reaction

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RESULT 15
AAD34707
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 13; Conserv
or tetracycline operator cassette, comprising a promoter operably linked to TR coding sequence, a transcriptional terminator sequence and two enhancer sequences and another promoter with at least one of tetracycline
                                                                                                                                                                                                                                                                           Novel tetracycline repressor and/or tetracycline operator cassette having promoters, transcriptional termination sequences, enhancer sequences and coding region of desired polynucleotide for modulating
                                                                    The present invention relates to a novel tetracycline repressor (TR) and/or tetracycline operator cassette, comprising a promoter operably linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tetracycline repressor; TR; tetracycline operator cassette; promoter; transcriptional terminator; enhancer; plant herbicide resistant; ss.
                                                                                                                                                                         Example 1; Fig 29F; 193pp; English.
                                                                                                                                                                                                                                              gene expression
                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-339804/37.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tet operator and MAS caat-tata fragment DNA, tetO-caat-tata-r.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (BADI ) BASF PLANT SCI GMBH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hall G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
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Pred. No. 5.9e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
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operator sequences,

coding

region of a desired polynucleotide, second

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                                                                                               Query Match
Best Local S
                                                                              Matches
                                                                                                                                                                                            transcriptional terminator sequence located 3' of the polynucleotide and two enhancer sequences. The invention is useful for modulating the expression of a gene in a plant; for making a plant herbicide resistant; and for expressing the desired gene in specific plant tissues. The invention is useful as a substitute for tetracycline, any currently known etracycline analogue, and/or any known analogues functional equivalents. The tetracycline analogue and/or equivalent may have inherent properties that make it advantageous to its application in a tetracycline inducible system. For e.g. when compared to tetracycline, known tetracycline analogue or known tetracycline functional equivalents. The present sequence is tet operator and MAS caat-tata fragment DNA used in constructing the 35S- and MAS-based promoter cassettes.
                                                                                                                                                            Sequence 36 BP; 10 A; 7 C; 5 G; 14 T; 0 other;
23 ACTGATAGAGTGCA
                                    6 ACTGATAGAGTGTA
                                                                            13;
                                                                                                   Similarity
                                                                              Conservative
36
                                      19
                                                                                                   59.0%;
92.9%;
                                                                                0
                                                                                                 Score 12.4; DB : Pred. No. 6e+03;
                                                                                Mismatches
                                                                                                                      24;
                                                                                1;
                                                                                Indels
                                                                                                                    Length
                                                                                                                          36;
                                                                                0;
                                                                                Gaps
                                                                                0
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Search completed: March 26, 2003, 11:22:03 Job time: 180.455 secs